# VIRGINIA ENHANCED OPERATORS QUALIFICATION PROGRAM UPDATE 2016





APPALACHIAN NATURAL GAS DISTRIBUTION COMPANY









## The Beginning

- VGOA Executive Committee formed in 2011
  - VA SCC began discussions regarding OQ

 SCC reviewed existing plans, training and testing materials and shared their concerns with the VGOA Executives

 After discussions, it was agreed that the existing OQ programs needed to be improved

## The Beginning cont...

- It was decided to partner with a third party vendor,
   Northeast Gas Association
- Use their OQ model as a foundation on which to build the Virginia Enhanced Operators Qualifications
- Protocols and guidelines were established to address any potential conflicts or other issues
- In 2012 SME Teams were scheduled to work on specific tasks

## **Task Development Process**

- Evaluation development
- Validation

Validation review

- Online training development
- Online training review and SME approval

### **Benefits**

QR cards

Opportunity for companies to update O&M manuals

Mutual aid between companies

Contractor acceptance

## **Qualification VS Training**

 Training is designed as refresher training for qualification purposes only

 It is not designed to replace or act as comprehensive company or manufacturers training in any way

 Equipment specific training should be provided by the operator

## **Qualification VS Certification**

- The program only covers qualification and not certification of joining of PE pipe.
- Currently performed by each operator individually.

 SME team has been tasked to develop a uniform method for certification of individuals

#### VIRGINIA OQ PROGRAM DEVELOPMENT TASK STATUS

| UPDATED: October 24, 2016 |   |                           |            |                             |   |  |   |  |          |                        |  |  |  |  |  |
|---------------------------|---|---------------------------|------------|-----------------------------|---|--|---|--|----------|------------------------|--|--|--|--|--|
| Task<br>#                 | Task Name   | Stage                     |            |                             |   |  |   |  |          |                        |  |  |  |  |  |
|                           |   | Evaluation<br>Development | Validation | SME<br>Validation<br>Review | Draft Online<br>Training<br>Storyboard<br>Completed by<br>ITS | Online<br>Training<br>Storyboard<br>Comments<br>Supplied to<br>ITS by SMEs | E-learning<br>Course<br>Completed by<br>ITS | E-learning<br>Course<br>Comments<br>Supplied to<br>ITS by SMEs |          |                        |  |  |  |  |  |
| 1                         | AOCs around a Meter   | ✓                         | ✓          | ✓                           | ✓   | ✓  | ✓-  | ✓  | ✓        | Completed              |  |  |  |  |  |
| 2                         | Line Locating   | ✓                         | ✓          | ✓                           | ✓   | ✓  | ✓   | ✓  |          | Completed              |  |  |  |  |  |
|                           | Investigating Leak or Odor Complaints Classifying Gas Leaks               | <i>,</i>                  | <b>√</b>   | <b>√</b>                    | <b>√</b>  | · · · · · · · · · · · · · · · · · · ·                                      | <b>,</b>                                    | <b>4</b>   | <b>√</b> | Completed  Completed   |  |  |  |  |  |
|                           | Patrolling  | ✓                         | ✓          | ✓                           | <b>√</b>  | <b>√</b>   | ✓   | ✓  |          | Completed              |  |  |  |  |  |
|                           | Leak Survey   | <b>√</b>                  | <b>√</b>   | ✓                           | ✓   | · •  | <b>√</b>                                    | ✓  |          | Completed              |  |  |  |  |  |
|                           | Excavation and Backfill   | ✓                         | ✓          | ✓                           | ✓   | ✓  | ✓   | ✓  |          | Completed              |  |  |  |  |  |
| 8                         | Installation of Pipe  | ✓                         | ✓          | ✓                           | ✓   | ✓  | ✓   | ✓  |          | Completed              |  |  |  |  |  |
|                           | Joining Plastic Pipe  | ✓                         | ✓          | ✓                           | ✓   | ✓  | ✓   | ✓  |          | Completed              |  |  |  |  |  |
| 10                        | Mechanical Joining of Pipe  | <b>✓</b>                  | ✓          | ✓                           | <b>~</b>  | ✓  | ✓   | ✓  | ✓        | Completed              |  |  |  |  |  |
|                           | Inspect The Condition of Exposed Pipe Inspection of 3rd Party Excavations | <b>,</b>                  | <b>√</b>   | <b>√</b>                    | <b>✓</b>  | <b>√</b>   | <b>*</b>                                    | <b>√</b>   |          | Completed<br>Completed |  |  |  |  |  |
|                           | Purging   | ✓                         | ✓          | ✓                           | ✓   | ✓  | ✓   | ✓  |          | Completed              |  |  |  |  |  |
| 14                        | Pressure Test   | <b>√</b>                  | ✓          | ✓                           | ✓   | ✓  | ✓   | ✓  | ✓.       | Completed              |  |  |  |  |  |

Completed

15 Stopping Gas Flow

#### VIRGINIA OQ PROGRAM DEVELOPMENT TASK STATUS

UPDATED: October 24, 2016

Task #

29

32

34

Welding Tapping

Restore Service

Bending of Steel Pipe

Operating an Odorizer

Uprating SCADA

Task Name

Abandonment or Deactivation of a Pipeline

Installation of Customer Meters & Regulators
Inspect, Operate and Lubricate Valves

Starting up or Shutting Down Pipeline
Controlling and Monitoring Gas Pressures
Inspect and Test Pressure Regulator Station

Monitoring Natural Gas Odorization Levels

Inspect a Pressure Regulator Vault

Properties of Gas and AOCs

Field Interpretation of Pressure Recording Devices
Inspect Recording Gauge, Telemetering Equipment

Remove a Service Tee from Main Repair Distribution Lines Repair Transmission Lines Stage

**Draft Online** 

Online

**Training** 

E-learning

|    |                                 | Evaluation<br>Development |  | Validation |   |          |   | Storyboard<br>Completed by<br>ITS |   |   |  | Course<br>Completed by |  |   |   |  |
|----|---------------------------------|---------------------------|--|------------|---|----------|---|-----------------------------------|---|---|--|------------------------|--|---|---|--|
| 16 | Pipe Coatings                   |                           |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 17 | Anodes                          | ]                         |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
|    | Atmospheric Corrosion           |                           |  |            | ✓ |          | ✓ | . <u>.</u>                        | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
|    | Inspecting for a Shorted Casing | <u>.</u>                  |  |            | ✓ | <u>.</u> | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 20 | Clearing a Shorted Casing       | <u> </u>                  |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 21 | Conducting Interference Testing | <u> </u>                  |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 22 | Diodes and Bonds                |                           |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 23 | Electrical Isolation Couplings  |                           |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 24 | Pipe to Soil Potential          | <u>.</u> i                |  |            | ✓ |          | ✓ | . j                               | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 25 | Internal Corrosion              | <u> </u>                  |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 26 | Operation of a Rectifier        | 11                        |  |            | ✓ | <u>.</u> | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 27 | Measuring Soil Resistivity      | <u>.</u>                  |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |
| 28 | Test Stations                   |                           |  |            | ✓ |          | ✓ |                                   | ✓ | ✓ |  | ✓                      |  | ✓ | ✓ |  |

#### VIRGINIA ENHANCED OQ PROGRAM DEVELOPMENT - COVERED TASK EVALUATIONS

|        |                      | Evaluation Name (If different from covered         | Knowledge                             | Skill      |               |
|--------|----------------------|--|---------------------------------------|------------|---------------|
| Task # | Task Name            | task name)   | Evaluation                            | Evaluation | Requal Period |
| 9      | Joining Plastic Pipe |  |                                       |            |               |
| 9A     |                      | Joining Plastic Pipe - Static Electricity and AOCs | ,                                     |            | 3 years       |
| 9B     |                      | Joining Plastic Pipe - Manual Butt Fusion          |                                       |            | 3 years       |
| 9B.1   |                      | Joining Plastic Pipe - Manual Butt Fusion          |                                       | ✓          | 1 year        |
| 9C     |                      | Joining Plastic Pipe - Hydraulic Butt Fusion       | ,                                     | /          | 3 years       |
| 9C.1   |                      | Joining Plastic Pipe - Hydraulic Butt Fusion       |                                       | ✓          | 1 year        |
| 9D     |                      | Joining Plastic Pipe - Socket Fusion               | · · · · · · · · · · · · · · · · · · · | <b>/</b>   | 3 years       |
| 9D.1   |                      | Joining Plastic Pipe - Socket Fusion               |                                       | ✓          | 1 year        |
| 9E     |                      | Joining Plastic Pipe - Saddle Fusion               | ·                                     | /          | 3 years       |
| 9E.1   |                      | Joining Plastic Pipe - Saddle Fusion               |                                       | ✓          | 1 year        |
| 9F     |                      | Joining Plastic Pipe - Electrofusion               | •                                     | /          | 3 years       |
| 9F.1   |                      | Joining Plastic Pipe - Electrofusion Saddle        |                                       | ✓          | 1 year        |
| 9F.2   |                      | Joining Plastic Pipe - Electrofusion Coupling      |                                       | ✓          | 1 year        |
| 9G     |                      | Joining Plastic Pipe - Mechanical Joining          |                                       |            | 3 years       |
| 9G.1   |                      | Joining Plastic Pipe - Bolted Fitting              |                                       | ✓          | 1 year        |
| 9G.2   |                      | Joining Plastic Pipe - Compression Fitting         |                                       | ✓          | 1 year        |
| 9G.3   |                      | Joining Plastic Pipe - Stab Fitting                |                                       | ✓          | 1 year        |
|        |                      |  |                                       |            |               |

Notes: 1) An individual must qualify on Static Electricity and AOCs (9A)

2) To qualify for Hydraulic Butt Fusion (9C) an Individual MUST qualify on Manual Butt Fusion (9B)

## **Upcoming Task Releases**

- 15 task released to date
  - 32 knowledge evaluations
  - 18 performance evaluations
- 13 new corrosion task to be released in November 2016
  - 25 knowledge evaluations
- 21 (pressure regulating & distribution) remaining task released by February 2017
  - 30 knowledge evaluations
  - 7 performance evaluations

## Implementation Challenges

Scheduling/Timing

Language Barriers

Proctoring

Retesting

## Remaining on the agenda

Release remaining task

Securing the program

Development of written plan

Update O&M procedures

## **Safety Culture**

"Doing the right thing when nobody is watching"

Pride and Personal Accountability

 Team Effort to Ensure OQ Program Security and Integrity

## How we got here

Over 4 years in development

12 different SME teams

140+ Face to face meeting days in Richmond

45+ Web Conferences

## Questions?



